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AUTHOR	Blackford, Walter
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ABSTRACT

In an effort to facilitate cooperation on a state and regional basis to develop and support environmental education programs, the Western Regional Environmental Education Project is being conducted. The purpose of this report is to provide data on the status of state level programs conducted by Departments of Education and resource management agencies. A separate report is compiled for each state covering the following topics: state laws or policies; educational agency--activities and responsibilities; resources agency--activities and responsibilities; outstanding local programs; state level advisory committee; special state funding programs; testing and evaluation; resident outdoor programs; and additional information. Also included are a general summary of the above information; conclusions in the areas of personnel, funding, legislation, state agency cooperation, and evaluation; a data summary chart; list of state publications; and a list of council members from the 13 western states: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. (RH)

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Conservation and Environmental Education in the Western States

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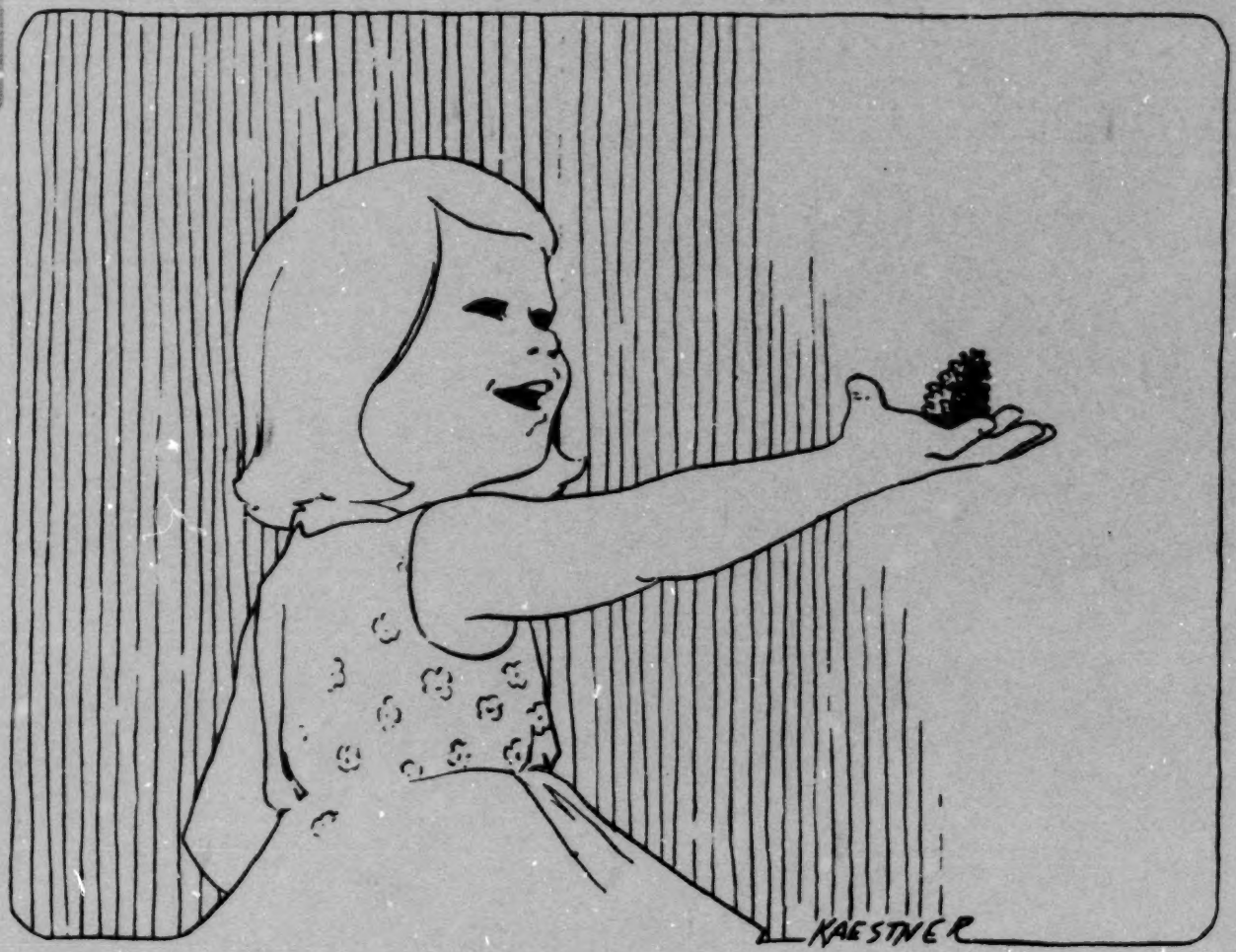
A Status Report on State-level Programs Conducted by Departments of Education and Resources Management Agencies

SECOND EDITION



WESTERN REGIONAL ENVIRONMENTAL EDUCATION PROJECT

CALIFORNIA STATE DEPARTMENT OF EDUCATION • Wilson Riles - Superintendent of Public Instruction • Sacramento, 1974

SE 018 100

CONSERVATION AND ENVIRONMENTAL EDUCATION IN THE WESTERN STATES

A Status Report on State-Level Programs Conducted By Departments of Education Agencies

Prepared for the Western Regional Environmental Education Project (ESEA, Title V, Section 905)

Preface

The Western Regional Environmental Education Council has been in existence for nearly three years and has progressed from a loose confederation of education and resource management personnel into a cohesive and hard-working unit. Many important strides have been made in promoting programs within member states and coordinating them on a regional basis.

Two projects of regional and even national importance stand out. The Energy and Man's Environment Program, first developed in the state of Washington, is now being implemented in at least seven member states, with others to follow. Through the cooperation of educators, resource management personnel, and public and private utilities, an important energy conservation education program is reaching thousands of children throughout the region.

Project Learning Tree--recently launched by the Council with the support and cooperation of the American Forest Institute and Education Research Systems, Inc.--will be our first major regionwide project and will produce and implement a major forest conservation program for elementary and secondary schools.

The Council is also producing a guide to the production and use of environmental education pupil-teacher materials and has conducted several mini-grant projects in member states.

Although the Council is entering its final year of funding under ESEA, Title V, Section 505, its future is bright. Recently incorporated as a nonprofit corporation, the organization has secured grant funds as well as membership dues which will enable it to continue operations at least as far as the end of fiscal 1976.

Through its affiliation with the Alliance for Environmental Education, Project NEED, and other similar groups, the Council has achieved status as a national voice in environmental education.

The following report is an update of one prepared by the Council in 1971, showing the status of state programs at that point in time. A comparison of the two shows some gains as well as losses, but the general picture is one of improvement. Hopefully, this trend will continue in the years ahead. The Western Regional Council will continue to do everything possible to provide leadership, programs, and services which will foster a continuance of this trend.

Rudolph J. H. Schafer, Consultant in Conservation Education for the California State Department of Education, served as Project Director. The report was prepared by Walter Blackford, Student Intern in the Department's Office of Conservation Education, which Mr. Schafer directs.

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Summary of Information

State-Level Consultants

Departments of Education

Five states reported that at least one full-time consultant is employed in their respective departments of education. Eight states had part-time consultants. Washington leads the way with three full-time environmental education specialists.

Resources Agencies

In all cases but two, the resources agency consultant in conservation-environmental education serves part-time. Arizona has one full-time consultant in its Game and Fish Department. Washington has one full-time and eight part-time contributors to its environmental education program. In six cases the part-time consultant was in the game and fish and/or wildlife departments. Four consultants served in resource management agencies and one each in the Office of Environmental Quality Control, State Forestry Department, and State Parks and Recreation Commission.

State Laws or Policies

Eleven of the states report state laws and/or policies requiring their departments of education to do something about conservation and/or environmental education. In most instances the action is to be implemented through curriculum activities. In two states there are no laws and/or other requirements regarding conservation education.

State Publications

Eleven of the reporting states have issued publications in the field of conservation and/or environmental education. The number of such publications ranges from one to twelve. Two states have not issued any publications to date.

State Advisory Committees

Ten of the states have advisory committees for conservation-environmental education. In six instances these committees are appointed by the State Superintendent of Public Instruction and/or the State Board of Education. In three cases the Governor appoints the members. In Idaho the committee is composed of selected representatives of several state and federal government agencies and of institutions of higher learning. The advisory committees work directly with the departments of education and/or state boards of education. In some instances they serve resources agencies as well.

Special Funds for Environmental Education

Seven states reported such funds. The sources of funding were quite varied and included ESEA, Title V; Fish and Game Department; Department of Education; hunting and fishing license fees; snowmobile tax funds; and personalized license plate sales. Six states were operating without special funding.

Outstanding Local Programs

Each state reported on at least one outstanding local program, while others reported on as many as 25. More than 70 outstanding local programs are mentioned in the reports.

Resident Outdoor Schools

Ten states reported that they had such programs. The range was from one to three hundred. In some cases there was no information as to the number of students involved. In this respect the numbers that were reported ranged from 17,000 to 90,000. Three states did not have any resident outdoor schools.

School Testing Program

Only one state reported having such a program. The rest, in most instances, however, indicated that plans were underway to do something about testing.

Text Adoptions

Textbooks regarding conservation-environmental education have been adopted in three states. The others, while using a great number of materials, have not formally adopted any as official state textbooks.

Conclusions

Personnel

Effective leadership at the state level--both by resource management agencies and departments of education--is not possible without adequate personnel. At least one person should have direct responsibility for the environmental education program of the agency, and ideally should be able to devote full time to this assignment.

Advisory committees--both internal and external--can be most useful. An interdepartmental committee can serve to coordinate related activities within the agency, while a citizens advisory committee can help build a strong base of community support and participation for the program.

Funding

Organizations and institutions delineate their priorities through the allocation of resources. If departments of education or resource management agencies consider environmental education important, it will be reflected in the departmental budget and the assignment of personnel. Certainly money all by itself will not do the job--expertise and commitment is essential--but the money must be there when needed if any real progress is to be made.

Special funding sources should be considered, particularly if they can be tied to environmental concerns. In one state, proceeds from the sale of personalized license plates provides funding for environmental education programs. In another, sales from a special stamp goes for programs to preserve non-game endangered wildlife species.

Legislation

Laws may be considered codification of those practices and principles society accepts as desirable or essential. Although laws cannot assure that each student will receive adequate environmental instruction, they can certainly create the climate in which such instruction will occur. In those states which have state curricular requests, there should be a clear statement covering environmental concern and concepts. Ideally, the requests should be broad enough to encourage a multigraded interdisciplinary approach.

Some states require an environmental education certification as part of the teaching credential, and this can be useful. In states which have an environmental curriculum requirement, certification of teachers to discharge this legal responsibility is implied.

For those states which adopt textbooks and other curricular materials at the state level, a request that environmental concepts be included and emphasized when appropriate insures that such materials will be available to the classroom teacher. And such emphasis need not be restricted to science or social studies materials. Reading study materials, language arts and home economics materials -- to name but a few -- can and should include an environmental emphasis.

State Agency Cooperation

Cooperation between state and federal resource management and development of education personnel is essential. Each has a piece of the action, so to speak, and, by working together, can mount a program which is much more effective than if each went his own way.

Evaluation

Each state must devise for itself a means of determining the effectiveness of its environmental education program. There will be little or no support for a program which cannot in some way demonstrate that it is producing the results expected of it. Evaluation is also necessary if the program is to be modified to meet changing needs.

ENVIRONMENTAL EDUCATION IN THE WESTERN STATES

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State	STATE CONSULTANT		State Laws	State Publications	State Advisory Committee	Special Funds for Environmental Education	Resident Outdoor Schools	State Testing Program	Text Adoptions
	Dept. of Educ.	Resource Agency							
ALASKA	1 full time	1 part time	Develop statewide plan for environmental education	4	Yes	Grants through Environmental Education Act, 72-73 and 73-74	3	No	None
ARIZONA	1 part time	1 full time	None	1	Yes	Title V:Fish and Game Dept.	None	No	None
CALIFORNIA	1 full time	1 part time	Curriculum, state grants, textbook adoption	5	Yes	Personalized License Plate Fund	26	No	Yes
COLORADO	1 full time	1 part time	Materials	4	No	None	8	No	None
HAWAII	1 part time	1 part time	Governor's Exec. Order	None	Yes	Department of Education	4	No	None
IDAHO	1 part time	1 part time	None	None	Yes	None	None	No	None
MONTANA	2 part time	1 part time	Teacher training, curriculum	1	No	None	1	No	None
NEVADA	1 part time	1 part time	Advisory committee, teacher training, curriculum	1	Yes	None	1	No	None
NEW MEXICO	1 part time	1 part time	Curriculum	1	No	None	None	Yes	None
OREGON	1 full time	1 part time	Arbor Day, teacher certification, graduation requirements	1	Yes	None	300	No	Yes
UTAH	1 part time	1 part time	Curriculum	1	Yes	"Leadership funds" for individual teachers	5	No	Yes
WASHINGTON	3 full time	1 f.time 8 p.time	Curriculum, materials	12	Yes	Personal license plate and snowmobile tax funds	100+	No	None
WYOMING	1 part time	1 part time	Curriculum	12	Yes	Hunting and fishing license fees	3	No	None

ALASKA

State Laws or Policies

Joint resolution by 1970 Legislature directed the Department of Education to develop a plan for environmental education and to establish a position within the Department for an Environmental Education Specialist.

The Alaska Planning Guidelines for Environmental Education were developed by a statewide citizens committee. The Alaska State School Board accepted the guidelines in 1972. The Commissioner of Education appointed an 11-member Alaskan Advisory Committee on Environmental Education in January, 1974. This Committee shall work towards the statewide implementation of the guidelines.

Educational Agency--Activities and Responsibilities

Environmental Education Specialist is responsible for the integration of environmental concepts into the curriculum at all educational levels. He/she plans and establishes environmental study areas, teacher workshops, classroom materials, and other aids relating to environmental education in Alaska.

Resources Agency--Activities and Responsibilities

The Information-Education Section of the Alaska Department of Fish and Game strives to promote the conservation and perpetuation of Alaskan wildlife through a greater public understanding and appreciation of wildlife, ecology, and wildlife management practices. The Department provides and disseminates information to the public and to schools through public speaking engagements, news releases and feature articles, departmental magazine, weekly television program, and miscellaneous printed materials. Nearly all other federal and state agencies are involved in promoting environmental education through their agency in cooperation with Alaska.

Outstanding Local Programs

Anchorage Borough School District; Juneau Borough School District; Hoonah School District; Ketchikan School District; Kenai Borough School District.

State-Level Advisory Committee

Appointed January, 1974. First organizational meeting was held in February.

Testing and Evaluation

None at state level. Evaluation plan tested in Kenai Title III project.

Resident Outdoor Programs

Three which involve 700 youngsters. Two more in the planning stages.

Additional Information

Environmental Education Act grants received for the 1972-73 and 1973-74 year to enable Alaska Department of Education to develop and implement a program of local environmental education community workshops.

In April, 1974, a five-day statewide Governor's Conference on Environmental Education was held at the University of Alaska. Representatives from each school district in the state attended the conference, as well as local, state, and federal agency spokesmen. Intensive training was offered to all participants enabling them to return to their communities and provide a variety of inservice training and curriculum assistance to K-12 educators.

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ARIZONA

State Laws or Policies

None at present. Impending legislation (HB 87) directs the Department of Economic Planning and Development to prepare a "master environmental plan for the use of the state's natural resources and protection of the environment."

Educational Agency--Activities and Responsibilities

Acts as coordinator of programs and policies on local and statewide levels. Investigates and tests innovative techniques in conservation education. Serves as liaison between the school systems and state and federal agencies and the colleges and universities.

Resources Agency--Activities and Responsibilities

The Conservation Education Coordinator, Arizona Game and Fish Department, produces, develops, and coordinates conservation programs and materials for schools. agencies and organizations. Prime responsibility and emphasis are placed on wildlife conservation. Environmental education workshops are conducted statewide.

Outstanding Local Programs

There are eleven programs so identified. These include three teacher workshops, three projects conducted by private agencies such as Boy Scouts and Audubon, three public agency committee projects, and field testing and evaluation of a state produced curriculum guide. Many more environmental education workshops are being offered by agencies, organizations, and individuals. Cooperative school systems and universities are supplying credit.

State-Level Advisory Committee

The Arizona Conservation Education Advisory Council is a voluntary, nonprofit organization that promotes "public awareness and understanding of conservation through the public schools." Membership consists of representatives of state and federal resources agencies, state educational organizations, and other groups involved in conservation education on a statewide basis. Membership is by invitation of the State Superintendent of Public Instruction via nominations submitted by the Council. The Committee meets semi-annually. An environmental education activities guide for elementary teachers is nearing completion.

Special State Funding Programs

State Department of Education provides money through ESEA,Title III,and Title V. Game and Fish Department also provides funds for conservation education.

Testing and Evaluation

The environmental education activities guide has been spot-tested and evaluated. Several workshop formats have also been evaluated.

Resident Outdoor Programs

None.

Additional Information

Conservation day camps, with environmental education emphasis, are becoming very popular. Approximately twenty sessions were held in 1973, and more are expected this year. Arizona's first Environmental Education Week was scheduled in February as a joint effort of the Governor's Committee of Arizona Environment and the Arizona Environmental Education Advisory Council. Governor Williams issued a proclamation establishing Environmental Education Week.

CALIFORNIA

State Laws or Policies

The Education Code requires that instruction in conservation and environmental protection be given in grades one through twelve and provides for a Conservation Education Service in the Department of Education.

The Education Code also provides for a grant program to be financed through the sale of personalized license plates and requires an emphasis on wise use of natural resources and environmental protection when appropriate in all state-adopted textbooks.

A joint policy statement on environmental education was signed by the Superintendent of Public Instruction and the Secretary of Resources, pledging the two agencies to cooperate in this area. Policy statements have also been developed on school use of tide pool resources as well as on educational activities in state parks.

Educational Agency--Activities and Responsibilities

Under the direction of a full-time consultant, the Department provides statewide program leadership, conducts teacher-training activities, coordinates the educational activities of community agencies, produces and distributes materials, maintains a conservation education library, provides consultant services, and makes program grants to qualified local educational agencies. The Department of Education has developed a publication titled, Ekistics--A Guide for the Development of an Interdisciplinary Environmental Education Curriculum, which is used throughout the state.

Resources Agency--Activities and Responsibilities

This agency provides support and assistance for statewide and educational programs. It also provides speakers, films, printed materials, field trips, environmental living program, and other services to all educational levels. It coordinates with the Department of Education and assists with the work of this agency. There is a Conservation Education Committee within the Resources Agency to work with the Department of Education and other appropriate organizations.

Outstanding Local Programs

The Los Angeles City Schools is developing a K-12 curriculum based on the state curriculum outline, Ekistics. The materials have been extensively field-tested, and teacher training workshops have been conducted. Contact Grant Carey, Laurel Ecology Center, 1044 N. Hayworth Avenue, Los Angeles, CA 90046.

The San Juan Unified School District operates an environmental education center which has developed many curriculum materials, conducts teacher training activities, and coordinates the summer outdoor studies program. Contact Randy West, Environmental Resources Center, Hemlock School, 5320 Hemlock, Carmichael, CA 94851.

The Humboldt County Office of Education is conducting a countywide environmental education project which features curriculum materials for classroom use as well as outdoor study experiences in a variety of locations. Contact Bill Gaffaney, Office of Environmental Education, 514 K Street, Eureka, CA 95501.

The Department of Education coordinates a statewide environmental merit award program based on the PEMAP materials produced by the U. S. Environmental Protection Agency. Outstanding local projects are honored at an annual banquet attended by the Governor and the Superintendent of Public Instruction. Contact Rudy Schafer, Consultant in Environmental Education, Department of Education, 721 Capitol Mall, Sacramento, CA 95814.

State-Level Advisory Committee

A citizen's advisory committee meets regularly to advise the Superintendent of Public Instruction and assist the Environmental Education Coordinator. An inter-departmental committee serves to coordinate appropriate departmental programs.

Special State Funding Programs

Funds from the sale of personalized license plates are used for environmental improvement projects -- including education. The 1974-75 Governor's Budget allocates $275,000 to the Department of Education for a statewide grant program.

HAWAII

State Laws or Policies

The Office of Environmental Quality Control (OEQC) has, by legislative mandate, responsibility to aid education in environmental matters. The Office of Environmental Quality also controls the Environmental Center at the University of Hawaii for coordination at university level on scientific matters relating to environmental impact statements only. The center is not involved in an environmental education program.

Education Agency--Activities and Responsibilities

The Department of Education is responsible for the development of a kindergarten through grade twelve curriculum, a major portion of which is designated as environmental studies.

Resources Agency--Activities and Responsibilities

The Office of Environmental Quality Control is responsible for the coordination of all state agency efforts in environmental control. Its consultive services are extended to all state agencies, including the Department of Education, on matters of environmental education, legislative efforts, and liaison with federal and city environmental personnel. The OEQC also advises the legislature and the Governor on environmental problems.

Outstanding Local Programs

The Foundation Approach in Science Teaching--an ecology, physical science program for grades seven through nine--is presently being piloted in public and private schools and will be revised as needed through the university.

State-Level Advisory Committee

An Environmental Council, composed of 15 citizens at large, serves to advise the Office of Environmental Quality Control and the government on all environmental matters. All are appointed by the Governor upon the recommendation of private conservation organizations. The Director of Environmental Quality Control is chairman and meets monthly or as often as necessary with the Council.

Special State Funding Programs

Funds are available for a "Hawaiiana" program through the social studies section. This is the legislatively designated environmental education program of the state and involves interisland travel for study of Hawaiian culture.

Testing and Evaluation

A statewide survey of population and ecological concerns is planned. This is to be conducted through the university, with input from various agencies.

Resident Outdoor Programs

There are four outdoor programs operating in the state, involving 10,000 students.

IDAHO

State Laws or Policies

None.

Educational Agency--Activities and Responsibilities

Responsibilities of agency staff members are extremely limited since there are no personnel assigned full or part-time responsibility for conservation-environmental education. Certain Department staff members are assigned conservation-environmental education as peripheral activity in connection with their regular assignments.

Resource Agency--Activities and Responsibilities

Resource management agencies provide representation to the Advisory Committee on Environmental Education and supply printed material and trained personnel to work with teachers and schools.

Outstanding Local Programs

Survey statements indicate that such programs are found in, and/or maintained by Boise School District #1; Caldwell School District #132; Buhl School District #142 Jt.; Multi-District Desert Environmental Education Program, Lincoln County; and Boise State Teachers College Environmental Education Summer workshop. The U. S. Forest Service, Bureau of Land Management Soil Conservation Service, and Fish and Game agencies also conduct local programs both individually and cooperatively.

State-Level Advisory Committee

An Advisory Committee on Environmental Education is composed of representatives of the State Department of Education, State Department of Public Lands, State Fish and Game Department, University of Idaho Extension Service, State Parks and Recreation Department, U. S. Bureau of Reclamation, Idaho Department of Environmental Protection, Boise State College, U. S. Soil Conservation Service, Idaho Soil Conservation Commission, Boise National Forest, Bureau Sports, Fisheries and Wildlife, National Parks Service, and Bureau of Land Management.

Special State Funding Program

None. Proposals to establish a full-time position of Environmental Education Consultant have been unsuccessful.

Testing and Evaluation

None.

Resident Outdoor Programs

None.

Additional Information

The Advisory Committee has been successful in stimulating local sponsorship in several areas of a number of environmental education field days. It also sponsored the Governor's Conference on Environmental Education and Boise State College Teacher's Summer Workshop. Some success was experienced with cooperative programs via state garden clubs regarding natural teaching areas on school grounds.

NEVADA

State Laws or Policies

Senate Bill 350, 1971 (approved April 26, 1971) created an advisory committee on environmental education. It requires the State Department of Education to coordinate and develop an environmental education program and to appoint an environmental education consultant. The bill also provides for instruction in ecology in the public schools and the university and for outdoor education, teacher training, and certification in environmental education.

Educational Agency--Activities and Responsibilities

State Department of Education Consultant in Environmental Education provides leadership for the program through developing and distributing instructional materials, organizing teacher inservice training programs, and coordinating efforts of public and private educational agencies concerned with environmental education.

Resources Agency--Activities and Responsibilities

Department of Conservation and Natural Resources published Preserving Nevada's Environmental Heritage (Final Report--Governor's Natural Resource Council, November, 1970). The state SCS is providing technical assistance to all school districts for beautification and ESA development.

Outstanding Local Programs

Outstanding programs are reported for Clark, Washoe, and Churchill County schools.

State-Level Advisory Committee

Recent legislation created the Nevada Advisory Committee for Environmental Education for the purpose of advising, coordinating, and supporting environmental education programs in the state. The committee consists of seven members appointed by the Governor. The advisory committee has been instrumental in developing teacher certification endorsement requirements.

Special State Funding Programs

The 1973 Legislature funded the position of Environmental Education Consultant.

Testing and Evaluation

None.

Resident Outdoor Programs

One for underprivileged children.

MONTANA

State Laws or Policies

Section 75.75.09, subtitled "Conservation Education," reads: "Instruction in conservation shall be given in all schools. The scope of the conservation education program shall be approved by the Board of Education upon the recommendations of the Superintendent of Public Instruction and shall include a widespread understanding of conservation facts, principles, and attitudes. Such instruction shall not be a specific course, but shall be integrated with the instruction in related courses." (1971 Edition, School Laws of Montana)

Educational Agency--Activities and Responsibilities

The Office of the Superintendent of Public Instruction is conducting a pilot test of an Environmental Education Handbook which is interdisciplinary in nature and is based on units of instruction contributed by classroom teachers in the state of Montana. Evaluation of this test was to commence at the termination of the 1973-74 school year. There are approximately 50 school districts involved, and the material is being used by over 150 teachers.

Resources Agency--Activities and Responsibilities

The Fish and Game Department, through its Information and Education Division, is responsible for making the public aware of the Department's management policies through the employment of a Task Force on Gun Safety Men and Youth Educators, who visit school districts statewide and present talks on conservation. In addition, Fish and Game personnel conduct seminars and workshops for students, teachers, and citizens regarding the ecological systems of Montana.

Outstanding Local Programs

Outstanding local programs include the Great Falls public schools summer camping programs; the Missoula County high schools outdoor education program; the program of the Deer Lodge public schools; the Powell County Environmental Inservice Curriculum Center; the Cut Bank elementary schools conservation program, in cooperation with the National Park Service; the outdoor conservation and environmental education programs maintained by the Columbia Falls elementary schools; and the program of the Billings public schools. The Helena public schools are utilizing an outdoor education program for students at the high school level who are identified as potential high shcool dropouts. The director of this project is Terry Beaver, c/o Helena Senior High School.

State-Level Advisory Committee

None.

Special State Funding Programs

None.

Testing and Evaluation

Environmental Education Handbook pilot testing is being conducted by the Office of the Superintendent of Public Instruction.

Resident Outdoor Programs

School District #2, Billings, Montana 59101.

COLORADO

State Laws or Policies

The State Department of Education, by Senate Joint Resolution, is authorized to collect information, data, and materials regarding environmental and population problems that are appropriate for inclusion in courses of instruction. School districts are advised by the State Department of Education of the availability of such information. In effect, the Senate Joint Resolution merely enjoined the Department to do what it had already been doing.

Educational Agency--Activities and Responsibilities

The agency provides education in wildlife management and habitat as well as environment conservation information to public schools and related agencies; provides liaison, coordination, and services to wildlife conservation officers and other resource personnel in state and federal agencies; and assists in the development and implementation of environmental conservation and wildlife habitat and management programs and activities in Colorado schools.

Resource Agency--Activities and Responsibilities

The Colorado Division of Wildlife provides one-half of the budget for the Environmental Education Consultant in the Department of Education since this consultant handles a major part of the conservation-environmental education program of the division; provides films, speakers, and written materials to school groups; and works directly with the Center for Environmental Learning, Keep Colorado Beautiful, and others.

Outstanding Local Programs

Fifteen outstanding programs were reported by the Colorado Department of Education. A complete list of addresses is available from the CDE.

State-Level Advisory Committee

A formal advisory committee does not exist, but an informal cooperative working relationship among federal, state, and local agencies with environmental conservation, wildlife management, and related responsibilities has been created. Known as the Roundtable, the purpose of this group is to open dialogue and promote communication and cooperation among the various agencies. Though the Roundtable does not report directly to the State Superintendent of Public Instruction, its efforts will aid in eliminating duplication and in increasing the understanding of common goals and problems.

Special State Funding Program

Funds for the Environmental Conservation Project are provided jointly by the Division of Wildlife and the Department of Education.

Testing and Evaluation

None.

Resident Outdoor Programs

Several operate within the state. Three programs are conducted by the Colorado Outdoor Education Center, Florissant, Colorado 80816. Exact numbers of programs available and students involved were not reported.

Additional Information

Specific insight into the strategies, goals, and present operations of the Environmental Education Program is found in Department of Education publications. These include a Curriculum Guide in Conservation Education and Outdoor Education Programs in Colorado. Copies are free upon request. Various materials are also available from the Division of Wildlife.

NEW MEXICO

State Laws or Policies

Minimum standards approved by the State Board of Education provide for the inclusion of the conservation of natural resources in the science program at the elementary level.

Educational Agency--Activities and Responsibilities

A specialist in science and conservation education is assigned part time to implement the program. Through his leadership a Conservation Handbook for Teachers has been published. A series of workshops are planned for the Fall of 1971 to assist selected teachers in using the first edition, evaluate it, and provide revisions that may be necessary.

Resources Agency--Activities and Responsibilities

Although the State Game Department has no legislated responsibilities in this area of instruction, it does, to the limit of its financial resources and personnel, provide speakers, publications, and films for schools, clubs, and radio informational programs. Hunter-safety training, which includes instruction in conservation and environmental quality, is a mandatory responsibility of this agency. Liaison is maintained with other state, federal, and local agencies concerned with conservation.

Outstanding Local Programs

Outstanding local programs include those of the Roswell public schools (geology museum, teacher training, field trip, and science program); and the Albuquerque public schools (130-acre outdoor education center in the Sandia Mountains for teacher training and on-site visitation by pupils).

State-Level Advisory Committee

No such committee existed at the time of the survey, but plans were underway to form one. Representation will be sought from teacher groups, university teacher education personnel, and others from related subject areas, as well as representation from interested resource agencies and public organizations.

Special State Funding Program

None.

Testing and Evaluation

One third of all school districts are evaluated each year by objectives. The California Test of Basic Skills is administered to the fifth, eighth, and eleventh grades.

Resident Outdoor Programs

None.

Additional Information

There is an organization in Santa Fe known as the Central Clearinghouse that has been doing a considerable amount of work toward promoting environmental education in that area. It operates entirely on private donations. In some instances this group has cooperated with the State Department of Education in reaching other areas beyond Santa Fe.

OREGON

State Laws or Policies

State law requires schools to provide activities in conservation and environment on the last Friday in April.

Educational Agency--Activities and Responsibilities

The State Board of Education promotes environmental education in the schools and provides assistance to schools via inservice training program, curriculum development, and materials. The Board requires each local school district to develop environmental competencies which students must achieve in order to receive a diploma.

Elementary teacher candidates must meet environmental studies requirements in order to be certificated. The same applies to secondary science and social studies certification.

Resources Agency--Activities and Responsibilities

State and federal resource agencies provide materials and assistance to Oregon schools and contribute to teacher training activities in environmental and conservation education.

Outstanding Local Programs

Resident outdoor education programs in a three-county Portland metropolitan area, teacher inservice training with the U. S. Forest Service, and the Outdoor Education Masters Program. Another outstanding program is the Environmental Education Clearinghouse, funded by the Environmental Education Act, housed at Portland State University.

State-Level Advisory Committee

Membership consists of educators and conservationists representing public and private organizations. Members are appointed by the Oregon Board of Education. Meetings are monthly, during the school year, at the State Department of Education, Salem.

Special State Funding Programs

None.

Testing and Evaluation

None.

Resident Outdoor Programs

Approximately 300 operating involving 17,000 students. This means about fifty percent of Oregon's sixth graders are attending a resident outdoor school.

UTAH

State Laws or Policies

None. However, the State Board of Education has recommended to the forty autonomous school districts that conservation-environmental concepts be included in their respective curricula.

Educational Agency--Activities and Responsibilities

The State School Office has an Environmental Education Committee representative of several curricula areas plus guidance and evaluation and teacher education programs. This committee functions under the guidance of the objectives established by the State Board's Committee on Environmental Education.

Resource Agency--Activities and Responsibilities

The Utah Division of Wildlife Resources, through the Chief, Information and Education, supplies the public with information about the division's stewardship for managing the wildlife resources. The supplying of such information to education is a secondary consideration at present. Identifiable trends indicate that the division will become more involved with environmental education.

Outstanding Local Programs

At present 25 school districts have been identified as offering outstanding environmental education projects. For example, under an ESEA, Title III, grant, the Alpine School District has published a Teacher's Guide to Environmental Education for grades kindergarten through twelve, covering all subject areas.

State-Level Advisory Committee

The Utah State Environmental Education Advisory Committee is composed of members selected by the State School Office upon recommendation of the chairman of the State Office Environmental Education Committee. Selection is made on the basis of the individual's interest and philosophy toward environmental education. At present, meetings are held on a monthly basis.

Special State Funding Programs

Extended-school-year funds are widely used to support environmental education programs. Some "leadership" funds are available to competent educators involved in environmental programs.

Testing and Evaluation

None.

Resident Outdoor Programs

At present there are five such programs. There is no precise information as to the number of students involved.

Additional Information

The state of Utah had an ESEA, Title III, project which was voted one of the 14 best projects in the United States by the U. S. Office of Education. The state emphasis is presently focused on district-level environmental education committee organization. Once a school district forms an EE committee, the state-level EE committee can serve in an advisory role.

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WASHINGTON

State Laws or Policies

Legislation passed in 1971 authorizes the Department of Natural Resources to withdraw certain lands for the purposes of preserving "natural ecological systems" for the study and use of schools and colleges. Senate Concurrent Resolution #12 directs the State Superintendent of Public Instruction, in cooperation with existing public and/or private agencies deemed appropriate, to examine methods and assist in efforts to provide course materials, teaching support, and/or suggestions for a series of related courses or a single course on ecology.

Educational Agency--Activities and Responsibilities

The Office of the State Superintendent of Public Instruction prepares guidelines in environmental education, provides for pre- and inservice training for teachers, publishes and disseminates materials, and provides consultant services and environmental education centers.

Resources Agencies--Activities and Responsibilities

The Departments of Game, Ecology, Natural Resources, Highways, Parks and Recreation, Social and Health Services, and Emergency Services are cooperating with the Superintendent of Public Instruction's Office to provide policies for the support of environmental education in the schools and for the general public. The State Parks and Recreation Commission administrates, operates, and maintains areas and facilities for environmental and outdoor education programs. The State Department of Game employs a full-time environmental education specialist and offers consultant services to the recreation and education community.

Outstanding Local Programs

Sedro Woolley School District was the first in the state to establish and adopt environmentally oriented curriculum objectives. The Youth Development Conservation Corps was created by the State Legislature in 1961. Highline and Snohomish County School Districts pioneered development of school-owned resident facilities for environmental education. An environmental education consultant is assigned by the United States Forest Service to the State Superintendent of Public Instruction's CISPUS Environmental Learning Center. Several outstanding local environmental education curriculum development projects are nearing completion. These include Edmonds (K-12), Seattle/Bellevue (5-6), Highline (Project Ecology K-12), and Mt. Vernon Environmental Education Center (K-12).

State-Level Advisory Committees

The Washington State Environmental Education Advisory Committee is currently inactive.

Testing and Evaluation

An evaluation program has been developed for the CISPUS experience by Harry Johnson of the State Superintendent's evaluation staff.

Resident Outdoor Programs

The CISPUS Environmental Learning Center involved 6,700 students in 1971 in their outdoor education facility. More than 100 school districts in the state offer resident outdoor programs. Programs are conducted at CISPUS, at State Park facilities, or at facilities owned by the district.

Additional Information

The Superintendent of Public Instruction and the Governor jointly proclaimed the week of March 3-9 to be Energy Awareness Week for all Washington schools. Teaching materials, a film, and a videotape program were developed as part of a long term commitment to instruction in this area. A population curriculum for junior high school use is scheduled for completion in fall, 1974.

WYOMING

State Laws or Policies

State Board of Education Resolution directs the State Department of Education "...to prepare procedures and guidelines for local curriculum development by the public schools in environmental and ecological education for kindergarten through grade twelve."

Educational Agency--Activities and Responsibilities

Attempts have been made to set state goals and tie state, local, federal and private program development to these goals. The Department encourages expanded attention to comprehensive environmental education activities in local districts through department workshops, publications, etc. Through Title III (ESEA), numerous local projects are funded and supervised by the department. Resource packets for distribution to local schools are under preparation.

Resources Agency--Activities and Responsibilities

As part of the Information-Education Division, the Wyoming Game and Fish Commission has been active for about 15 years in presenting information on wildlife ecology and interactions of resources to the schools. Wildlife ecology is presented via a wildlife mobile exhibit. The Department of Agriculture is involved in a similar program.

Outstanding Local Programs

Outstanding local programs include the Kemmerer Outdoor Laboratory: Cheyenne Ecology Laboratory; the Northeast Wyoming Resources Area (Upton); outdoor education experiences in Powell, Riverton, and University Laboratory School. The Game and Fish Department is involved with conservation camps for Boy and Girl Scouts and 4H youngsters. The Lander Conservation Center for Creative Learning is another outstanding program.

State-Level Advisory Committee

A fourteen-member committee composed of representatives from state agencies, private industry, higher education, and the public schools was appointed by the State Superintendent of Public Instruction. A goals statement setting forth the functions of the committee has been developed. The committee has not been active for over a year.

Special State Funding Programs

Part of the funds collected for hunting and fishing license fees is placed in the Information-Education budget of the Game and Fish Department to enable them to present programs of conservation education to children and adults.

Testing and Evaluation

None.

Resident Outdoor Programs

Three are operating at the present time under sponsorship of the Wyoming Game and Fish Department, the National Outdoor Leadership School, and Teton Science School.

Additional Information

Curriculum development, funded under the provisions of Title III, ESEA, and based on state goals, expanded the present curriculum to include environmental education. A package of 300 activities regarding conservation education was made available to schools in the fall of 1971.

The University of Wyoming, in cooperation with state, federal, and private agencies, offers a summer teacher training course. Community colleges are presenting workshops with active participation from agricultural interests, the oil industry, and the U.S. Forest Service.

Publications

ALASKA

Department of Education - Environmental Education--Philosophy of the State Department.
Department of Fish and Game - Wildlife Notebook Series: Alaska's Wildlife; Upland Game Birds; Alaska Fish Tales and Game Trails; Sport Fishing Guide; and Sport Fish Predictions.

ARIZONA

Game and Fish Department - Wildlife Views.

CALIFORNIA

Department of Education - Ekistics--A Handbook for Curriculum Development in Conservation and Environmental Education; Handbook of California's Natural Resources; Bibliography of Free and Inexpensive Conservation Education Materials; Guide to Conservation Education Films, Filmstrips, and Picture Sets; You and Nature; Conservation in Miniature; and A Report to the California State Board of Education by the Advisory Committee on Conservation Education.
Department of Parks and Recreation - A Report on a Decade--A Review of the 60's; a Preview of the 70's; California's Historical Landmarks, and Point Lobos State Reserve Booklet.

COLORADO

Department of Education - Curriculum Guide in Conservation Education; Conservation Illustrated, a supplement to the Curriculum Guide in Conservation Education, A Multidisciplinary Learning Strategy Using In-Class and Out-of-Class Learning Environments; and Environmental/Conservation and Outdoor Education Programs in Colorado.

HAWAII

None listed on survey sheet.

IDAHO

None.

MONTANA

Department of Education - Environmental Education Handbook.

NEVADA

Department of Education - Preserving Nevada's Environmental Heritage (Final Report--Governor's Natural Resources Council, November 1970).

NEW MEXICO

Department of Education - Environmental Education Handbook for New Mexico Teachers.

OREGON

Department of Education - Outdoor Education in Oregon Schools and Studies in Conservation and Outdoor Activities.

UTAH

Department of Education - Teacher's Guide to Environmental Education.

WASHINGTON

Department of Education - State Plan for Environmental Education and Guidelines for Environmental Education and Supporting Monographs.

State Parks and Recreation Commission - Resident Youth Camp Brochure.

WYOMING

Department of Education - Understanding Ecology.

Game and Fish Department - Our Feathered Friends, Our Furry Friends, Our Big 'N'Wild Friends, Our Finny Friends, Guarding our Heritage, and Land is Life.

Members of the Western Regional Environmental Education Council

ALASKA

Mrs. Jo Michalski, Specialist
Environmental Education
Department of Education
Pouch F - Alaska Office Building
Juneau, Alaska 99801

ARIZONA

William R. Hernbrode
Conservation Education Coordinator
Arizona Game and Fish Department
2222 West Greenway Road
Phoenix, Arizona 85023

Bob Stonoff
803 W. 11th Street
Tempe, Arizona 85281

CALIFORNIA

Rudolph J. H. Schafer
State Department of Education
721 Capitol Mall
Sacramento, California 95814

William Dillinger
Department of Parks and Recreation
1416 Ninth Street
Sacramento, California 95814

COLORADO

Richard Hess
Game, Fish and Parks Division
6060 Broadway
Denver, Colorado 80216

George Ek, Jr.
5670 Everett Street
Arvada, Colorado 80002

HAWAII

Meyer S. Bogost
1915 Alaeloa Street
Honolulu, Hawaii 96821

IDAHO

Harry C. Mills
State Department of Education
Idaho State Office Building
Boise, Idaho 83707

MONTANA

Vincent Yannone
Hunter and Safety Director
Montana Fish and Game
Mitchell Building
Helena, Montana 59601

Edward L. Eschler
Office of Superintendent of
Public Instruction
State Capitol
Helena, Montana 59601

NEVADA

Terry Retterer
Department of Fish and Game
1100 Valley Road (P.O. Box 10678)
Reno, Nevada 89510

Jack O'Leary
Nevada State Department of Education
Hero's Memorial Building
Carson City, Nevada 89701

NEW MEXICO

B. K. Graham
Department of Education
Capitol Building
Santa Fe, New Mexico 87501

Jack McDowell, Assistant Chief
Public Affairs Division
Department of Game and Fish
State Capitol
Santa Fe, New Mexico 87501

OREGON

Cliff Hamilton
Oregon Game Commission
P.O. Box 3503
Portland, Oregon 97208

Wilmer R. Nance
Oregon Board of Education
942 Lancaster Drive, N.E.
Salem, Oregon 97310

UTAH

R. LaMar Allred
Utah State Board of Education
1400 University Club Building
Salt Lake City, Utah 84111

L. Ray Remund
Utah Division of Wildlife Resources
1596 West North Temple
Salt Lake City, Utah 84116

WASHINGTON

David Kennedy
Supervisor of Environmental
Education Program
Department of Public Instruction
Old Capitol Bldg.
Olympia, Washington 98504

Russell W. Hupe
Environmental Education Program Supervisor
Washington Department of Game
600 North Capitol Way
Olympia, Washington 98504

WYOMING

Joe Vogler
Wyoming Game and Fish Dept.
Box 1589
Cheyenne, Wyoming 82001

Alan G. Wheeler
Wyoming State Dept. of Education
Capitol Building
Cheyenne, Wyoming 82001

U.S. OFFICE OF EDUCATION

Dr. David Phillips
Division of State Agencies
Cooperation
U. S. Office of Education
400 Maryland Avenue, S.E.
Washington, D. C. 20202

73 273 DE6208 7 73 400